



CITY OF EMMETT OFFICE OF THE MAYOR

501 East Main Street
Emmett, Idaho 83617

Bill Butticci, Mayor
Chrystal Whiteley, City Clerk
Ron Bjorkman, Attorney

Councilman: Eltona Henderson
Stephen Frey
Michael Williams
John Rogers
Mike Stout
Michelle Welch



April 4, 2012

United States E.P.A. – Region 10
1200 6th Avenue OW-133
Seattle, WA 98101

Subject: NPDES permit ID-002031-1 – Repair and Mitigation Efforts to comply with Consent Order dated September 29, 2011

Mrs. Erickson;

As requested, we are providing a report and documentation of our Aeration Basin failure and efforts to date to address repairs and mitigate our NPDES permit exceptions as well as our plans and intentions to comply with the consent order. The City has dedicated a great deal of resources to address the failure of our new, advanced wastewater treatment plant, which was built to address permit exceptions being experienced by the lagoon treatment system.

We feel the detailed list below, along with each associated appendix detailing that effort; will stress the commitment and importance the City places on maintaining NPDES permit compliance and improving the integrity of the facility to provide a long term resolution to issues currently being faced and to provide for addressing potential future environmental considerations.

Date	Item	Description	Appendix
2/2/2010	Brown and Caldwell initial review	City tasks B&C for precursory review of A.B. failure	
2/18/2010	Brown and Caldwell precursory review received	B&C provides opinion on Aeration Basin failure	1
4/21/2010	Layfield repair costs	Layfield submits budget for repair cost	2
5/14/2010	Brown and Caldwell tasks	B&C submits 5 possible task orders for WWTP reviews	



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5/17/2010	Bi-Sulfate system	Bi-sulfite plan and addition approved by DEQ for De-chlorination to meet 0.10 mg/L limit	3
7/13/2010	Council approves attorney	Kim Trout hired as legal counsel for City of Emmett	
9/24/2010	Council approves plant review and Trout/Jones as city representation	Council approves funds for comprehensive Aeration Basin failure and process review. Approves Trout/Jones to proceed on City's behalf	4
3/16/2011	B&C draft of Aeration Basin review	Counsel receives draft of Aeration Basin review	
3/31/11	Idaho DEQ and EPA Region 10 approve pH control	DEQ and EPA confirm that use of Sulfuric Acid to control effluent pH is acceptable	
4/18/2011	EPA requests schedule and efforts to date since plant failure	City requests time-line from Trout/Jones for mediation, arbitration, litigation, and plant improvements.	5
4/27/11	Reports submitted to counsel	Trout/Jones reviewing hydraulic and treatment plant reports from B&C	
5/9/2011	Brown and Caldwell repair estimates	City tasks Brown and Caldwell to estimate costs for engineering and modified basin repairs	
5/12/2011	Brown and Caldwell plant evaluation	B&C provides plant evaluation report to Trout / Jones for review	6



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5/16/2011	Meeting with David Domingo	Ron Gearhart and Travis Capson meet with David Domingo in Post Falls, Idaho and discuss status of the Emmett Wastewater treatment plant, ideas for mitigation, and possible consent agreement with EPA Region 10	
5/18/2011	Request for mediation	Trout/Jones drafts mediation demand letter for Holliday Engineering	
5/23/2011	Conference call with Trout/Jones, City of Emmett, and EPA Region 10	Conference call with David Domingo to discuss future actions for the City of Emmett. EPA requests schedule of compliance and efforts to date information to address on-going NPDES permit exceptions.	
5/24/2011	City requests estimates from Brown and Caldwell	City asks B&C to provide cost estimates for engineering, permit negotiations, and treatment plant upgrades for current and future NPDES permit compliance	
6/7/2011	Mitigation Report	City of Emmett sends mitigation report to Region 10	7
9/16/2011	Plant repair memo	Brown and Caldwell issues final draft of interim repairs to the Aeration Basin to achieve permit compliance	8



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9/21/2012	Layfield on-site	Layfield on-site to begin Aeration Basin repairs	
9/29/2012	Layfield departs	Layfield completes replacement of Aeration Basin floor and electronic leak testing	
9/29/2011	Consent Order	EPA issues consent order to enact plant repairs by 1/1/2012 and achieve permit compliance by 3/1/2012	9
10/17/2011	MTI Seepage test	MTI performs seepage test. Test fails with leakage measured at 2.55" per day	10
10/20/2011	City investigates, evaluates, and repairs	City investigates leaks and begins leak identification	
10/28/2011	Clarifier suspected of excessive seepage	City begins efforts to repair clarifier leaks	
11/16/11	Clarifier repairs complete	City has cleaned, stripped, and sealed all cracks and joints.	
11/23/2011	MTI Seepage test	MTI performs seepage test. Test fails with leakage measured at 2.175" per day	10
12/1/2011	City plans for continued investigation	Parts purchased and fabrication started on A.B. / Clarifier penetration sealing to isolate leak.	
12/5/2011	Consent order extension	City sends documentation detailing the City's efforts to date to comply with the Sep. 29, 2011 consent order time requirements and requests an extension to achieve compliance	11



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12/6/2011	B&C provides permanent improvement option for upgrading the Aeration Basin	B&C provides conceptual drawing for enacting permanent improvements to the aeration basin	12
12/12/2011	Basin Cost Tracking	Cost tracking completed for 2011	13
12/13/2011	Weather	Freezing weather prevents continued leak detection and repair efforts.	
12/19/2011	B&C cost estimates	B&C provides detailed cost estimates for most advantageous option for enacting permanent improvements to the aeration basin	14
12/20/2011	DEQ repair concern letter	DEQ notifies the City of Emmett that the interim repairs do not meet state requirements, specifically for redundancy of treatment processes.	15
1/17/2012	Eric Heringer SNW	SNW provides initial analysis showing potential 1.1 million dollars of funding that would not require rate increases by refinancing existing bonds and allow for an additional 1.0 million dollars of new debt if approved by the public which also, would not increase rates	16
2/13/2012	Eric Heringer SNW	Refined Bond Analysis	17
2/15/2012	I&I reduction Project	City receives DEQ approval for I&I reduction project	18



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2/27/2012	Eric Heringer SNW	Application for refinance submitted to Bond Bank	
2/29/2012	I&I project complete	City replaces 850 of high priority sewer main	
3/5/2012	EPA request for information	EPA requests detailed descriptions of all efforts to date or are scheduled to occur to meet the deadlines in the consent order	
3/5/2012	Manhole repair	City repairs deteriorated manhole in high I&I location	
3/6/2012	Brown and Caldwell Basin upgrade description	B&C provides updated upgrade description	19
3/20/2012	Summary of basin expenses	Budget impacts for 2011 and 2012 provided for Eric Heringer	20

The City of Emmett anticipates the approval of the bond refinancing and additional debt to enact permanent repairs to the treatment as addressed in appendix 16 by May 2012. The bond election for the public to vote on the additional 1 million dollar debt is scheduled for May 15, 2012.

The City will continue to evaluate the source of the leak in the aeration basin / clarifier structure as temperatures allow and will seek information to allow for a successful retrofit of the basin structure.

The City will continue to optimize the lagoon operation by; 1) applying barley straw to filter and inhibit alga growth in the final cell and 2) relocate the floating cover from the aeration basin to the effluent end of lagoon cell #2. These two control measures should be in place by the end of April 2012. The City will also evaluate installing additional mixers and baffles in lagoon cell #1 and evaluate sludge accumulation in the lagoons to access its' impact on the process by the end of April 2012. A report of the evaluation and selected improvements (if any) will be included with future DMR's and will also be sent to you.



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The City of Emmett appreciates EPA's evaluation of our efforts to improve our effluent quality and to enact repairs to the treatment plant constructed and placed in operation in 2009. We feel confident that the measures we have taken will demonstrate the City of Emmett's commitment and desire to comply our NPDES permit. Highlights of these measures include;

- Engineering for evaluation of the failed new plant and defining needed improvements \$179,352.87
- Legal counsel and pending mediation and litigation support \$71,211.99
- City repairs efforts include: 1106.5 man-hours at a cost of \$34,240.72 and material costs of \$21,953.29
- Contract labor (new basin floor) \$68,366.00
- Chemical additions of approximately of \$40,000 per year
- Bond refinancing and election for additional debt
- I&I reduction project in February 2012, \$28,500.00

Questions or requests for additional information can be directed to

Ron Gearhart
City of Emmett Utility Manager
208-573-7606
rgearhart@qwestoffice.net

Sincerely,
City of Emmett

A handwritten signature in blue ink, reading "Bill Butticci", with a long horizontal flourish extending to the right.

Bill Butticci – Mayor
208-365-6050
mayorbutticci@cityofemmett.org



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CC:

Todd Crutcher
Idaho State D.E.Q.
1445 N. Orchard
Boise, Idaho 83706-2239

David Domingo
NPDES Compliance Unit, OCE-133
1200 6th Avenue, Suite 900
Seattle, WA 98101

Maria Lopez
EPA – Idaho Operations Office
1435 N. Orchard St.
Boise, Id 83706

Attachments;

- 1 City of Emmett: Aeration Baffle Review Comment
- 2 Layfield Proposal Letter
- 3 Bi-Sulfite Plan for Treatment Plant
- 4 Brown and Caldwell Contract: Plant Review and Upgrade Support
- 5 Aeration Basin Repair Schedule
- 6 Final Treatment Plant Evaluation by Brown and Caldwell
- 7 Mitigation Report: June 2011
- 8 Buffer Strip Layout / Interim Repairs Drawing/ Interim Repairs Memo
- 9 Consent Order September 29, 2011
- 10 Seepage test data / 2nd Seepage test readings
- 11 Consent Order Extension Packet: December 2011
- 12 Brown and Caldwell: Final Basin Repair Concept Drawing
- 13 City of Emmett: Basin Repair Cost Tracking Spreadsheet
- 14 Brown and Caldwell: Cost Estimate for Basin Upgrade
- 15 DEQ Opinion Letter regarding Upgrades to Aeration Basin
- 16 Seattle Northwest Initial Bond Analysis
- 17 Seattle Northwest Refined Bond Analysis
- 18 DEQ Approval for Canal Street Improvements
- 19 Brown and Caldwell: Upgrade Time Estimates
- 20 Summary of expenses for Bond Analysis